WHAT IS CLAIMED IS:

1. An isolated immune complex comprising a protein and an antibody that binds with said protein, wherein the protein is selected from the group consisting of gp300 of HIV-2, p200 of HIV-2, p90/80 of HIV-2, and $gp300_{SIV}$.

2. The immune complex of claim 1, wherein the antibody, protein, or both the antibody and protein, are labeled with an immunoassay label selected from the group consisting of radioisotopes, enzymes, fluorescent labels, chemiluminescent labels, and chromophore labels.

3. An isolated antibody which binds with a protein selected from the group consisting of gp300 of HIV-2, p200 of HIV-2, p90/80 of HIV-2, and $gp300_{SIV}$.

4. The antibody of claim 3, wherein the antibody is labeled with an immunoassay label selected from the group consisting of radioisotopes, enzymes, fluorescent labels, chemiluminescent labels, and chromophore labels.

5. An immunogenic composition comprising a pharmaceutically effective amount of one or more proteins of human immunodeficiency virus type 2 (HIV-2) and a pharmaceutically acceptable carrier, wherein said proteins are selected from the group consisting of gp300, p200, and p90/80 of HIV-2.

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6. An *in vitro* diagnostic method for detecting infection of cells by human immunodeficiency virus type 2 (HIV-2), comprising:

a) providing a composition comprising cells suspected of being infected with HIV-2;

b) disrupting cells in the composition to expose intracellular proteins; and

c) assaying the exposed intracellular proteins for the presence of one or more proteins selected from the group consisting of gp300 of HIV-2, p200 of HIV-2, p90/80 of HIV-2, and $gp300_{SIV}$,

wherein the presence of said one or more proteins is indicative of the presence of HIV-2.

7. The method of claim 6, wherein the assaying of exposed intracellular proteins is carried out by a method selected from the group consisting of electrophoresis of the proteins and immunoassay of the proteins with antibodies that are immunologically reactive with gp300 of HIV-2, p200 of HIV-2, p90/80 of HIV-2, or $gp300_{SIV}$.

8. The method of claim 7, wherein the antibodies are labeled with an immunoassay label selected from the group consisting of radioisotopes, enzymes, fluorescent labels, chemiluminescent labels, and chromophore labels.

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9. An *in vitro* method for detecting antigens of human immunodeficiency virus type 2 (HIV-2), comprising:

a) providing a composition suspected of containing antigens of HIV-2; and

b) assaying the composition for the presence of one or more proteins selected from the group consisting of gp300, p200, and p90/80 of HIV-2,

wherein the presence of said one or more proteins is indicative of the presence of antigens of HIV-2.

10. The method of claim 9, wherein said assaying of the composition is carried out by a method selected from the group consisting of electrophoresis of said proteins and immunoassay with antibodies that are immunologically reactive with gp300, p200, or p90/80 of HIV-2.

11. The method of claim 10, wherein the antibodies are labeled with an immunoassay label selected from the group consisting of radioisotopes, enzymes, fluorescent labels, chemiluminescent labels, and chromophore labels.

12. An *in vitro* diagnostic method of distinguishing HIV-2 infection, or co-infection of HIV-1 and HIV-2, from HIV-1 infection in cells comprising:

a) providing an extract comprising intracellular proteins of said cells; and

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b) assaying said extract for the presence of one or more proteins selected from the group consisting of gp300 of HIV-2, p200 of HIV-2, p90/80 of HIV-2, and $gp300_{SIV}$,

wherein the presence of said one or more proteins is indicative of the presence of HIV-2 infection or co-infection of HIV-1 and HIV-2.

13. The method of claim 12, wherein said assaying of the extract is carried out by a method selected from the group consisting of electrophoresis of said proteins and immunoassay with antibodies that are immunologically reactive with gp300, p200, or p90/80 of HIV-2.

14. The method of claim 13, wherein the antibodies are labeled with an immunoassay label selected from the group consisting of radioisotopes, enzymes, fluorescent labels, chemiluminescent labels, and chromophore labels.

15. An *in vitro* diagnostic method for detecting the presence or absence of antibodies which bind to a protein of HIV-2, comprising:

a) contacting one or more proteins of HIV-2 selected from the group consisting of p90/80, p200, and gp300 of HIV-2 with a biological fluid for a time and under conditions sufficient for said proteins and antibodies in the biological fluid to form a protein-antibody immune complex; and

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b) detecting the formation of the complex.

16. The method of claim 15, wherein the detecting step further comprises measuring the formation of said immune complex.

17. The method of claim 15, wherein said one or more proteins are labeled with an immunoassay label selected from the group consisting of radioisotopes, enzymes, fluorescent labels, chemiluminescent labels, and chromophore labels.

18. An *in vitro* diagnostic kit for detecting the presence or absence of antibodies which bind to a protein of HIV-2, comprising:

a) one or more proteins of HIV-2 selected from the group consisting of p90/80, p200, and gp300 of HIV-2; and

b) means for detecting the formation of immune complex between said proteins and said antibodies;

wherein the proteins and the means are present in an amount sufficient to perform said detection.

19. The kit of claim 18, wherein the means for detecting the formation of the immune complex is an assay selected from the group consisting of radioimmunoassay, immunoenzymatic assay, and immunofluorescent assay.

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20. An *in vitro* method for detecting antibodies in a sample of human body fluid which specifically bind to antigenic sites of an antigen, comprising:

a) contacting said antigen with antibodies from human body fluid for a time and under conditions sufficient to permit formation of an antigen-antibody complex between said antigen and said antibodies; and

b) detecting the formation of said antigen-antibody complex,

wherein said antigen comprises a protein selected from the group consisting of p90/80 of HIV-2, p200 of HIV-2, gp300 of HIV-2, and $gp300_{SIV}$.

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